**YEAR 2**

**ACADEMIC YEAR 2013-14**

Program Review and Planning Year 2 form is an evaluation of the progress on last year’s goals (Year 1 PRP) and is also planning of goals and activities for the current year (2013-2014).

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| **Discipline: Astronomy** | **Date 12/15/13**  |
| **Instructional Discipline Reviewed (Each discipline is required to complete a Program Review.)** | **Add Date (00/00/2014)** |

**Purpose of Program Review and Planning:**

The institution assesses progress toward achieving stated goals and makes decisions regarding the improvement of institutional effectiveness in an on-going and systematic cycle of evaluation, integrated planning, resource allocation, implementation, and re-evaluation. Evaluation is based on analyses of both quantitative and qualitative data (ACCJC/WASC, Standard I, B.3.).

**DEFINITION**

Program Review and Planning is the means by which faculty, staff, and/or administrators complete a self-evaluation of an academic discipline, program, or service.  The self-evaluation includes an analysis of both quantitative and qualitative data on how the academic discipline, program, or service is supporting the mission and strategic planning of Palomar College in meeting the educational and career interests of students.  Through the review of and reflection on key program elements, such as program data and student learning outcomes, Program Review and Planning defines the curriculum changes, staffing levels, activities, and/or strategies necessary to continue to improve the academic discipline, program, or service in support of student success.  The Program Review and Planning process also ensures short-term and long-term planning and identification of the resources necessary to implement identified goals and priorities.

[**Palomar College Mission**](http://www.palomar.edu/about/goals.aspx)

Our mission is to provide an engaging teaching and learning environment for students of diverse origins, experiences, needs, abilities, and goals. As a comprehensive community college, we support and encourage students who are pursuing transfer-readiness, general education, basic skills, career and technical training, aesthetic and cultural enrichment, and lifelong education. We are committed to helping our students achieve the learning outcomes necessary to contribute as individuals and global citizens living responsibly, effectively, and creatively in an interdependent and ever-changing world.

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| **Program/Discipline Mission** |
| **List everyone who participated in completing this Year 2 Program Review and Planning Document.****Mark Lane, Jim Pesavento** |
| **State your program’s or discipline’s mission statement. If you don’t have one, create one.****The mission of the Astronomy Program at Palomar College is educate our students in the fundamental science of astronomy as a way to understand our universe. We achieve this mission by providing high quality educational opportunities in astronomy for a diverse student population who wish to achieve general education science credit, earn a two year degree in astronomy, or to fulfill transfer requirements for a degree in astronomy at California universities. As one of the core STEM disciplines, our astronomy courses promote the understanding of basic science and physical processes to create a science literate society and encourage student participation in STEM disciplines and careers.**  |
| **Explain how your program’s or discipline’s mission is aligned with the Palomar College Mission Statement.****The Astronomy Program is aligned with the college mission statement through its focus on providing a high quality science education for a diverse student population. As one of the core STEM disciplines, the astronomy program promotes general education transfer preparedness through our courses and degree programs, and a focus on student success through learning outcomes evaluation.** |

**STEP I. Review and Evaluation of Year 1
In this section, evaluate the program plans you described in last year’s Program Review and Planning Document.
Refer to “STEP II: PLANNING” in your 2012-13 YEAR 1 PRP document at:** <http://www.palomar.edu/irp/PRPCollection.htm>.

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| 1. **Progress on Current Plans. For each planning area below, summarize your program plans as documented in the Year 1 form (last year’s form) and evaluate your progress on completing them.**

**Curriculum (Step II.A. of Year 1 PRP)**1. **Summarize the plans you made regarding curriculum? (Consider how SLO assessment results influenced curriculum planning.)**

**Our goal continues to provide more hands-on observational projects in astronomy related to our laboratory courses or through our Astronomy 295 (Directed Study) course. This will help with SLOs by enhancing student learning in the areas of astronomy that are fundamental to the science as a whole.**1. **How did you implement and evaluate those curriculum changes?**

**Unfortunately continued problems with the observing platform on the roof of the NS Building are hampering our efforts to use our telescopes and related equipment. Until the College can ensure a stable platform, we will not be able to implement this curriculum goal.****Class Scheduling (Step II.B. of Year 1 PRP)**1. **Summarize the plans you made regarding class scheduling?**

**Class offerings in astronomy continue to meet the current demand. One area of weakness is the lack of adjuncts to cover potential expansion of sections offered.**1. **How did you implement and evaluate those class scheduling changes?**

**We were able to hire three adjunct instructors that helped us expand the Astronomy 100 to a new MW 4:30pm section and increase the number of Astronomy 105L laboratory sections to two guaranteed sections each semester. The addition of the planetarium as a teaching resource has enhanced student learning.****Faculty Hiring (Step II.C. of Year 1 PRP)**1. **What faculty needs did you articulate for this discipline?**

**The Astronomy Program will need to replace Jim Pesavento following his planned retirement (tentatively scheduled for 2014). Historically our program offers an average of 8 sections of Astronomy 100, one section of Astronomy 120, and 2 - 3 sections of Astronomy lab per semester. This robust offering of courses requires a minimum of two full-time instructors augmented by 2 – 3 adjunct instructors. An additional factor is that both full-time instructors are supposed to share the responsibilities of running the planetarium while sharing the bulk of the teaching load of astronomy courses. The ESAS department and College Administration needs to begin the process of planning to hire an eventual replacement for Jim Pesavento.****Additional faculty needs are related to the new planetarium. This job requires a minimum of two people to successfully meet the needs of giving planetarium presentations, promoting the planetarium to the public, creating planetarium shows, and keeping up with the day-to-day operation of the facility. In addition, the new planetarium is a bigger and more sophisticated facility that needs a minimum of two part time employees to operate when open to the public. Currently there is one full time faculty member (Mark Lane) that serves at the Planetarium Director and is the entire staff of the planetarium (not including temporary workers who help with some of the logistics). This means that if there is an illness, or other issue that keeps him from working, the Planetarium will have to shut down. The Division/Administration needs to work on funding and hiring additional help so that we can maximize the potential of this grand new venue.**1. **What is the current status of the plan you articulated?**

**Jim Pesavento is expected to retire following the conclusion of the Spring 2014 semester. Efforts will be made to quickly find a replacement for him through a formal request to the IPC. Two (sometimes three) adjunct instructors now teach for us to cover some of our additional section offerings.** |
| 1. **Analysis and Impact of Resources Received (Step III – Year 1 – Resource Requests for Discipline)**
2. **What is the dollar amount you received from IPC last year (2012-2013)? You can access the 2012-13 IPC PRP allocations by clicking on this link:** <http://www.palomar.edu/irp/201213resourceallocations.pdf>

**$0**1. **How were those funds spent?**

**N/A**1. **Identify permanent employees requested and prioritized by IPC, i.e., classified/CAST/administrative. You can access this information by clicking on this link:** <http://www.palomar.edu/irp/staffingplan.pdf>

**0**1. **Describe the impact of these funds received from IPC on:**
2. **Curriculum (courses, SLOs)**

**N/A**1. **Number of students affected**

**N/A**1. **Other**

**N/A**1. **Describe unmet funding requests as they apply to your planning and priorities.**

**N/A** |

**STEP II. Evaluation of Program & SLOAC Data**

**In this section, review and analyze updated program data, the results of SLOACs, and other factors that could influence your program plans for this upcoming year.**

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| 1. **Program Data. Provide an analysis of the past six years (2007-08 through 2012-13) of your discipline’s data. Consider trends in the data and what may be causing them. (For enrollment, WSCH, & FTEF data, use Fall term data only). The links below will take you to the three sets of data to analyze.**
	* Enrollment, Enrollment Load, WSCH, and FTEF (<http://www.palomar.edu/irp/PRP_WSCH_FTEF_Load.xlsx>) **(Use Fall term data only).**
	* Course Success and Retention rates (<http://www.palomar.edu/irp/PRP_Success_Retention.xlsx>**). Note, this file is very large and there will be a delay both when you open the file and again when you initiate the first search.**
	* Degrees and Certificates (<http://www.palomar.edu/irp/PRP_Degrees_Certs.xlsx>).

**Describe your analysis and observations.****The enrollment has dropped considerably since the Fall Semester of 2010-11 college year to the Fall of 2012-13. There has been a decrease of about 60% between those Semesters. The decrease is clearly understood in that we offered less Astronomy 100 and Astronomy 105L classes in the Fall of 2012 and 2013. This is in part due to Mark Lane resuming his duties as Director of the new Planetarium. However, the Census Load of 98% indicates that there is a need of more Astronomy classes than what we now offer. The major problem that we have is that there are few adjuncts that can teach Astronomy. Neither one of us can take more classes; therefore, we need additional adjuncts. In our Department, Astronomy is probably the most difficult of the disciplines; yet, the Retention Rate remains high, i.e., in the 90's. The challenges of Astronomy are seen in the typical low Pass Rates over the years. With some variation, the average over the years is about 55%. This is about 10% lower than the average pass rate of the entire Department and about 5% lower that the Division. This data can be misleading in that Jim Pesavento's (and Mark Lane's) average Pass Rate for four Astronomy 100 classes in the Fall of 2013 is about 77% (his data). Since the College data is that of all of the Astronomy classes, we think that the Astronomy lab class is decreasing the overall Pass Rate.** **Does this data reflect your planning, goals, and activities? If not, why?****Our planning includes additional Astronomy lecture classes providing that we have the staff to teach those classes. The Retention Rates and the Pass Rates can be improved in the Astronomy Lab class by having lab exercises involving the use of telescopes. This should improve student interest in the class; and, therefore, grades.** |
| 1. **SLOACs. Using the comprehensive SLOAC reports and faculty discussions as a guide, provide a summary and analysis of Student Learning Outcome assessments at the course and program level. Link to SLOAC resources:** <http://www2.palomar.edu/pages/sloresources/programreview/>
2. **Summarize your SLOAC activities during the 2012-2013 academic year.**

1. **Course SLOACs: What did you learn from your course SLO assessments? What will you maintain and/or change because of the assessment results?**

**We have learned that our students understand some major concepts and not others. For example, they understand stellar classification but not what causes seasons. To properly assesses "student learning" every major concept discussed in class should be evaluated. Therefore, the SLO questions should cover all of the concepts. However, we already do that. They're called quizzes and exams; which not only determine if a student passes a class, but also allows us to see in a quiz what concepts the students are missing. We merely review those concepts and see if they now understand them by giving the students an exam.** 1. **Program SLOACs: What did you learn from your program SLO assessments? What will you maintain and/or change because of the assessment results?**

**N/A** |
| 1. **Other Relevant Data and Information.**
2. **Describe other data and/or information that you have considered as part of the assessment of your program. (Examples of other data and factors include, but are not limited to: external accreditation requirements, State and Federal legislation, four-year institution directions, technology, equipment, budget, professional development opportunities).**

**There is no TMC for Astronomy at the present time. However, it would be very similar to the one in Physics with the addition of Astronomy 100, Astronomy 120 and Astronomy 105L. The "Core" courses for the TMC in Physics are Calculus and Calculus based physics courses. The Planetarium has proven to be a phenomenal asset to student learning. For example, the proper use of the 3D aspect of the planetarium would help students greatly with their understanding of Seasons. Also, the use of telescopes with updated digital cameras and spectragraphs would keep Astronomy majors current on the new technologies.**1. **Given this information, how are your current and future students impacted by your program and planning activities? Note: Analysis of data is based on both quantitative (e.g., numbers, rates, estimates, results from classroom surveys) and qualitative (e.g., advisory group minutes, observations, changes in legislation, focus groups, expert opinion) information.**

**The most common statement we observe from students is that they had no concept of what the rest of the universe is like and how the Earth fits into it. The Astronomy program does and will continue to fascinate students and allow them to deal with fundamental questions as; "who we are and how did we get here". Some students are inspired to learn more and eventually they contribute to our understanding of the universe.**  |
| 1. **Labor Market Data. For Career/Technical disciplines only, provide a summary of the current labor market outlook. This data can be found on the CA Employment Development website at** [**http://www.labormarketinfo.edd.ca.gov/**](http://www.labormarketinfo.edd.ca.gov/) **. Go here and search on Labor Market Information for Educators and Trainers (http://www.labormarketinfo.edd.ca.gov/Content.asp?pageid=112). Click on summary data profile on right side of page to search by occupation. (Check other reliable industry or government sources on Labor Market Data websites that support findings and are relevant to Region Ten – San Diego/Imperial Counties. Include job projections and trends that may influence major curriculum revisions.)**

**N/A** |
| 1. **Discipline/Program Assessment:** **Based on Steps I and II above, describe your discipline’s or program’s:**
2. **Strengths**

**The strengths of the Astronomy program include the range of pertinent courses that keep up with a rapidly changing field of study. Our Astronomy 120, Solar System course, is unusual in that it deals with the Astronomy and Geology of the Solar System. Most Colleges have this topic included in one survey course in Astronomy. We also have offered a course in extraterrestrial lIfe. We do have a topics course to allow us to address new discoveries, e.g., planets outside of our Solar System. Of course, the Planetarium is a great learning tool.** 1. **Weaknesses**

**The two primary weaknesses are the need to offer more classes, but cannot do this due to the lack of qualified professors; and the lack of a decent observatory platform to use for the Astronomy lab class.**1. **Opportunities**

**There are also two primary opportunities to improve Astronomy learning. One is to use the Planetarium as a classroom for our classes. The facility would greatly enhance the learning environment. The second is to incorporate the Solar Telescope in our discussion of spectra and the features and activities of our Sun.** 1. **Challenges**

**There is one specific challenge, i.e., how to use the Planetarium properly for classes and not affect the Planetarium school and public programs. The other is very general. This is a College-wide problem of a large number of students not having adequate skills in math and language. We also agree that this should be addressed at the college level.**  |

**STEP III. Updated Goals & Plans**

**Taking the analyses you completed in Steps I and II, describe your program’s goals and plans.**

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| 1. **Goals and Plans: What are your goals for 2013-14? When establishing goals, consider changes you are making to curriculum, schedule, and staffing as a result of the assessments you completed in STEPS I and II above. Goals should reflect your program/discipline’s top priorities for the coming academic year.**

**For EACH goal provide the following:** |
| **GOAL #1** |
| **Program or discipline goal** | **Our primary goal for the 2013-14 academic year is to work towards hiring a full time replacement for Jim Pesavento (retiring after the Spring 2013 semester). Replacing Jim will keep us at two full time astronomers which is essential for keeping our program running and having the potential for growth.** |
| **Plans/Strategies for implementation** | **Taking the proper steps and submitting the proper requests to get a full time replacement faculty position approved.** |
| **Outcome(s) expected (qualitative/quantitative)** | **Hiring a full time astronomer by the end of the Spring 2014 semester.** |
| **GOAL #2** |
| **Program or discipline goal** | **Proper modification of the observing platform on the roof of the NS Building.** |
| **Plans/Strategies for implementation** | **This has been an ongoing burden for the Astronomy discipline since it hinders our ability to have a hands on component to our discipline. Facilities has been working with Jim Pesavento to look for and implement various test solutions to the problem of vibrations.** |
| **Outcome(s) expected (qualitative/quantitative)** | **We expect to modify the platform to minimize vibrations so that telescopes can be effectively used. This will have a likely financial cost involved to remedy the problem.** |
| **GOAL #3** |
| **Program or discipline goal** |  |
| **Plans/Strategies for implementation** |  |
| **Outcome(s) expected (qualitative/quantitative)** |  |
| **ADDITIONAL GOAL (*if needed*)** |
| **Program or discipline goal** |  |
| **Plans/Strategies for implementation** |  |
| **Outcome(s) expected (qualitative/quantitative)** |  |

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| 1. **Alignment with College Mission and Strategic Plan Goals.**
2. **How do your goals align with the Palomar College Mission?**

**The goals are aligned with the college mission statement by providing a high quality science education for a diverse student population.**1. **How do your goals align with the College’s Strategic Plan Goals? See the College’s Strategic Plan 2016 Goals at:** <http://www.palomar.edu/strategicplanning/PALOMAR_STRATEGICPLAN2016.pdf>

**Keeping two full time astronomers on faculty will meet Strategic Plan Goal 3.1 by rebuilding staffing levels to support priorities in Staffing Plan 2016. It will also align with Strategic Plan Goal 3.3 & 3.4 to strengthen the technological knowledge and skills of faculty by having astronomy faculty regularly take part in using telescopes and detection equipment with students.**1. **Based on your program review and planning, describe any issues/concerns that have emerged that require interdisciplinary or College-wide dialogue and/or planning.**

**Losing the use of our observing platform on the roof of the NS Building has been a major blow to our ability to do hands-on astronomy. It is critical that the College be supportive of the need to remedy the problems with the platform and find the funds to implement the fix.** |

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| **STEP IV. Resources Requested for Academic Year 2013-2014:**  |
| **Now that you have completed Steps I – III, Step IV requires you to identify all additional resources you will need to achieve your Goals and Plans/ Strategies (Step III). First, identify all resource needs in each budget category.  You may have up to five (5) requests per budget category.  Provide a meaningful rationale for each request and how it links to your Goals, Plans, and Strategies.  \*Second, ALL your resource requests must be prioritized as one group; not prioritized within each budget category.  This means, you could have your #1 priority in Technology, your #2 priority in Short-term Hourly, and your #3 priority in Equipment, etc.  If you actually have five (5) requests in each of the five (5) budget categories, you would end up with 25 prioritized requests. IPC will not consider any requests that are not prioritized.Resource requests to simply replace budget cuts from previous years will not be considered.  PLEASE NOTE THAT ALL FUNDING ALLOCATED BY IPC IS ONE-TIME AND MUST BE SPENT WITHIN THE DEFINED TIMELINE. RESOURCE REQUESTS THAT SUPPORT MORE THAN ONE DISCIPLINE SHOULD BE INCLUDED ON THE ‘ACADEMIC DEPARTMENT RESOURCE REQUESTS” PRP FORM ONLY.** |

**Budget category a. Equipment (600010) (per unit cost is >$500). *Enter requests on lines below. Click here for examples of equipment:*** [***http://www.palomar.edu/irp/2013CategoriesforPRPResourceRequests.pdf***](http://www.palomar.edu/irp/2013CategoriesforPRPResourceRequests.pdf)

| **Resource Category** | **Describe** **Resource** **Requested** | **Discipline goal addressed by this resource** | [**Strategic Plan 2016 Goal Addressed by this Resource**](http://www.palomar.edu/strategicplanning/PALOMAR_STRATEGICPLAN2016.pdf) | **\* Priority Number for all Resource Request categories** | **Provide a detailed rationale for the requested resource. The rationale should refer to your discipline’s goals, plans, analysis of data, SLOACs, and the College’s Strategic Plan.****(If this resource is already funded in part or full, name the source and describe why the source is not sufficient for future funding.** | **Amount of Funding Requested (include tax, shipping, etc.)** |
| --- | --- | --- | --- | --- | --- | --- |
| **a1.**  | **None** |  |  |  |  |  |
| **a2.**  |  |  |  |  |  |  |
| **a3.**  |  |  |  |  |  |  |
| **a4.**  |  |  |  |  |  |  |
| **a5.**  |  |  |  |  |  |  |

| **Budget category b. Technology (600010) (computers, data projectors, document readers, etc.). Enter requests on lines below. *Click here for examples of technology:*** [***http://www.palomar.edu/irp/2013CategoriesforPRPResourceRequests.pdf***](http://www.palomar.edu/irp/2013CategoriesforPRPResourceRequests.pdf) |
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| **Resource Category** | **Describe** **Resource** **Requested** | **Discipline goal addressed by this resource** | [**Strategic Plan 2016 Goal Addressed by this Resource**](http://www.palomar.edu/strategicplanning/PALOMAR_STRATEGICPLAN2016.pdf) | **\* Priority Number for all Resource Request categories** | **Provide a detailed rationale for the requested resource. The rationale should refer to your discipline’s goals, plans, analysis of data, SLOACs, and the College’s Strategic Plan.****(If this resource is already funded in part or full, name the source and describe why the source is not sufficient for future funding.** | **Amount of Funding Requested (include tax, shipping, etc.)** |
| **b1.**  | **None** |  |  |  |  |  |
| **b2.**  |  |  |  |  |  |  |
| **b3.**  |  |  |  |  |  |  |
| **b4.**  |  |  |  |  |  |  |
| **b5.**  |  |  |  |  |  |  |

| **Budget Category c. Funds for Supplies (400010) (per unit cost is <$500 supplies) *Enter requests on lines below. Click here for examples of Supplies:***  [***http://www.palomar.edu/irp/2013CategoriesforPRPResourceRequests.pdf***](%20http%3A//www.palomar.edu/irp/2013CategoriesforPRPResourceRequests.pdf) |
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| **Resource Category** | **Describe** **Resource** **Requested** | **Discipline goal addressed by this resource** | [**Strategic Plan 2016 Goal Addressed by this Resource**](http://www.palomar.edu/strategicplanning/PALOMAR_STRATEGICPLAN2016.pdf) | **\* Priority Number for all Resource Request categories** | **Provide a detailed rationale for the requested resource. The rationale should refer to your discipline’s goals, plans, analysis of data, SLOACs, and the College’s Strategic Plan.****(If this resource is already funded in part or full, name the source and describe why the source is not sufficient for future funding.** | **Amount of Funding Requested (include tax, shipping, etc.)** |
| **c1.**  | **None** |  |  |  |  |  |
| **c2.**  |  |  |  |  |  |  |
| **c3.**  |  |  |  |  |  |  |
| **c4.**  |  |  |  |  |  |  |
| **c5.**  |  |  |  |  |  |  |

| **Budget Category d. Funds for Operating Expenses (500010) (printing, travel, maintenance agreements, software license, etc.). *Enter requests on lines below. Click here for examples of Operating Expenses:*** [***http://www.palomar.edu/irp/2013CategoriesforPRPResourceRequests.pdf***](http://www.palomar.edu/irp/2013CategoriesforPRPResourceRequests.pdf) |
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| **Resource Category** | **Describe** **Resource** **Requested** | **Discipline goal addressed by this resource** | [**Strategic Plan 2016 Goal Addressed by this Resource**](http://www.palomar.edu/strategicplanning/PALOMAR_STRATEGICPLAN2016.pdf) | **\* Priority Number for all Resource Request categories** | **Provide a detailed rationale for the requested resource. The rationale should refer to your discipline’s goals, plans, analysis of data, SLOACs, and the College’s Strategic Plan.****(If this resource is already funded in part or full, name the source and describe why the source is not sufficient for future funding.** | **Amount of Funding Requested (include tax, shipping, etc.)** |
| **d1.**  | **None** |  |  |  |  |  |
| **d2.**  |  |  |  |  |  |  |
| **d3.**  |  |  |  |  |  |  |
| **d4.**  |  |  |  |  |  |  |
| **d5.**  |  |  |  |  |  |  |

| **Budget Category e. Funds for temporary or student workers (230010/240010) Enter requests on lines below** |
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| **Resource Category** | **Describe** **Resource** **Requested** | **Discipline goal addressed by this resource** | [**Strategic Plan 2016 Goal Addressed by this Resource**](http://www.palomar.edu/strategicplanning/PALOMAR_STRATEGICPLAN2016.pdf) | **\* Priority Number for all Resource Request categories** | **Provide a detailed rationale for the requested resource. The rationale should refer to your discipline’s goals, plans, analysis of data, SLOACs, and the College’s Strategic Plan.****(If this resource is already funded in part or full, name the source and describe why the source is not sufficient for future funding.** | **Amount of Funding Requested (include benefits)** |
| **e1.**  | **None** |  |  |  |  |  |
| **e2.**  |  |  |  |  |  |  |
| **e3.**  |  |  |  |  |  |  |
| **e4.**  |  |  |  |  |  |  |
| **e5.**  |  |  |  |  |  |  |

**STEP V. Classified and administrative (contract) positions requests for academic year 2014-2015**

**Classified, CAST, or Administrator positions:  Enter each position request on the lines below.  You may request up to five (5) positions and they must be prioritized to be considered by IPC.  Contract position requests may include vacancies due to retirements, resignations, lateral transfers, etc., as well as any new positions to be considered.  Please note that only these position requests will be prioritized by IPC when developing the annual Staffing Plan for Instruction.**

| **Resource Category** | **Describe** **Resource** **Requested** | **Discipline goal addressed by this resource** | [**Strategic Plan 2016 Goal Addressed by this Resource**](http://www.palomar.edu/strategicplanning/PALOMAR_STRATEGICPLAN2016.pdf) | **Priority Number for Position Requests in Step V Only** | **Provide a detailed rationale for the requested resource. The rationale should refer to your discipline’s goals, plans, analysis of data, SLOACs, and the College’s Strategic Plan.****(If this resource is already funded in part or full, name the source and describe why the source is not sufficient for future funding.** | **Amount of Funding Requested (include benefits)** |
| --- | --- | --- | --- | --- | --- | --- |
| **1.**  | **Full-time astronomy professor** |  |  | **1** | **The Astronomy Program will need to replace Jim Pesavento following his planned retirement (tentatively scheduled for 2014). Historically our program offers an average of 8 sections of Astronomy 100, one section of Astronomy 120, and 2 - 3 sections of Astronomy lab per semester. This robust offering of courses requires a minimum of two full-time instructors augmented by 2 – 3 adjunct instructors. An additional factor is that both full-time instructors are supposed to share the responsibilities of running the planetarium while sharing the bulk of the teaching load of astronomy courses.**  |  |
| **2.**  |  |  |  |  |  |  |
| **3.**  |  |  |  |  |  |  |
| **4.**  |  |  |  |  |  |  |
| **5.** |  |  |  |  |  |  |

 **Department Chair/Designee Signature Date**

 **Division Dean Signature Date**